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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,551	09/27/2001	Hiroki Hachiyama	60188-099	8913

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EXAMINER	
THOMPSON, JAMES A	

ART UNIT	PAPER NUMBER
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/963,551	HACHIYAMA ET AL.	
	Examiner	Art Unit	
	James A. Thompson	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-4 and 6-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-4 and 6-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's arguments, filed 02 January 2008, with respect to the rejections of the claims under 35 U.S.C. § 103(a) have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, new grounds of rejection are made in view of newly discovered prior art.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 2, 4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US Patent 5,933,137) in view of Lindsay (US Patent 6,219,143 B1).

Regarding claim 2: Anderson discloses an image processor (figure 3; figure 4A; and column 3, lines 3-6 of Anderson) comprising an imager (figure 3(114) of Anderson) for capturing an image of an object (column 4, lines 14-19 of Anderson) and outputting image data representing the image captured (column 4, lines 18-24 of Anderson); and a compressor/expander (figure 3(344) and column 4, lines 55-60 of Anderson), which receives and compresses the image data and then outputs the compressed image data (column 5, lines 46-47 and column 8, line 1-11 of Anderson) or which receives and expands the compressed image data and then outputs the expanded image data (column 8, lines 41-46 of Anderson). The received raw image data is compressed in two ways. The first way is in terms of resolution, which produces the thumbnail image (column 8, lines 1-5 of Anderson) representation of the full-sized captured image (column 7, lines 58-64 of Anderson). The second way is standard compression, such as done to the screennail image (column 8, lines 6-11 of Anderson).

Anderson further discloses an image memory (figure 4A(532); column 4, lines 60-62 and column 5, lines 41-45 of Anderson) for storing the compressed image data thereon (column 5, lines 46-49 and column 10, lines 35-40 of Anderson); a display memory (figure 4A(536); column 4, lines 60-62 and

column 5, lines 41-45 of Anderson) for storing the expanded image data thereon (column 6, lines 3-11 of Anderson); a display (figure 3(402) of Anderson) for presenting thereon the expanded image data that has been once stored on the display memory (column 5, lines 58-62 of Anderson); and an interface (figure 3 (352) and column 5, lines 9-16 of Anderson) for recording the compressed image data, which has been once stored on the image memory, on a storage medium (figure 3(354) and column 10, lines 33-44 of Anderson), wherein image data corresponding to a series of images which, once stored on the image memory after being compressed (column 5, lines 46-49 and column 10, lines 35-40 of Anderson) and transferred to the display memory after being expanded (column 5, lines 58-62 of Anderson), are captured consecutively by the imager (column 10, lines 1-12 of Anderson) includes an image which is transferred from the image memory to the storage medium (column 10, lines 22-30 of Anderson), wherein the image is presented by the display based on the image stored on the display memory (column 10, lines 22-30 of Anderson).

Anderson does not disclose expressly that the image is transferred from the image memory to the storage medium while the image is presented by the display.

Lindsay discloses transferring an image from the image memory to the storage medium while the image is presented by the display (figure 1(60→65,60→70) and column 5, lines 9-17 of Lindsay – *processed image stored in image memory (some form of memory inherent part of 60) simultaneously transferred to display to be displayed and to storage medium to be stored*).

Anderson and Lindsay are combinable because they are from the same field of endeavor, namely the control, processing and storage of captured digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to simultaneously display and store the processed digital image data. The motivation for doing so would have been to allow the user to quickly see if the picture just taken is worth keeping. Therefore, it would have been obvious to combine Lindsay with Anderson to obtain the invention as specified in claim 2.

Regarding claim 4: Anderson discloses that the compressor/expander expands the compressed image data (column 8, lines 41-44 of Anderson), representing each of the series of images which is being transferred to the storage medium (column 8, lines 31-36 of Anderson), and then output the expanded image data to the display memory so that each said image being transferred can be presented on the display (column 8, lines 41-50 of Anderson).

Regarding claim 6: Anderson discloses that the display presents the series of images (column 8, lines 6-11 of Anderson) while the compressed image data corresponding to the series of images is stored on the storage medium (column 9, lines 44-50 and column 10, lines 33-44 of Anderson).

Regarding claim 8: Anderson discloses successively receiving image data corresponding to a series of images captured consecutively by an imager (column 4, lines 14-19 of Anderson); and successively compressing the received image data as compressed image data (column 5, lines 46-47 and column 8, line 1-11 of Anderson) by a compressor/expander (figure 3(344) and column 4, lines 55-60 of Anderson). The received raw image data is compressed in two ways. The first way is in terms of resolution, which produces the thumbnail image (column 8, lines 1-5 of Anderson) representation of the full-sized captured image (column 7, lines 58-64 of Anderson).

Anderson further discloses temporarily storing the compressed image data (column 5, lines 46-49 and column 10, lines 35-40 of Anderson) on an image memory (figure 4A(532); column 4, lines 60-62 and column 5, lines 41-45 of Anderson); successively outputting the compressed image data to the compressor/expander (column 8, lines 41-46 of Anderson); successively expanding the compressed image data by the compressor/expander (column 8, lines 41-46 of Anderson); successively storing the image data expanded by the compressor/expander (column 6, lines 3-11 of Anderson) on a display memory (figure 4A(536); column 4, lines 60-62 and column 5, lines 41-45 of Anderson); and storing an image of the compressed image data on a storage medium (figure 3(354) and column 10, lines 33-44 of Anderson), wherein the image which, once stored on the image memory after being compressed (column 5, lines 46-49 and column 10, lines 35-40 of Anderson) and transferred to the display memory after being expanded (column 5, lines 58-62 of Anderson), is presented by a display based on the image data stored on the display memory (column 10, lines 22-30 of Anderson).

Anderson does not disclose expressly that the image is stored on the storage medium while the image is presented by the display.

Lindsay discloses transferring an image to the storage medium while the image is presented by the display (figure 1(60→65,60→70) and column 5, lines 9-17 of Lindsay – *processed image stored in image memory (some form of memory inherent part of 60) simultaneously transferred to display to be displayed and to storage medium to be stored*).

Anderson and Lindsay are combinable because they are from the same field of endeavor, namely the control, processing and storage of captured digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to simultaneously display and store the

processed digital image data. The motivation for doing so would have been to allow the user to quickly see if the picture just taken is worth keeping. Therefore, it would have been obvious to combine Lindsay with Anderson to obtain the invention as specified in claim 8.

Regarding claims 7 and 9: Anderson discloses that the image memory and the display memory are implemented as a single memory (figure 4a(346,532,536) and column 4, lines 60-62 of Anderson).

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US Patent 5,933,137) in view of Lindsay (US Patent 6,219,143 B1) and Kuchta (US Patent 5,164,831).

Regarding claim 3: Anderson discloses that the compressor/expander produces a reduced-size image for each said image captured and compresses the reduced-size image to obtain and output the compressed image data (column 8, lines 6-11 of Anderson), and wherein the compressor/expander expands the compressed image data (column 8, lines 41-44 of Anderson), representing the series of images (column 8, lines 31-34 of Anderson), and then outputs the expanded image data to the display memory so that the reduced-size versions of the series of images can be displayed (column 8, lines 41-46 of Anderson) in the order in which the images have been captured (column 10, lines 3-12 of Anderson).

Anderson in view of Lindsay does not disclose expressly that said reduced-size versions of the series of images are added one by one on the same display so as to present a plurality of images on the display.

Kuchta discloses expanding compressed image data (column 7, lines 30-34 of Kuchta), representing each of a series of images (column 4, lines 47-50 of Kuchta); and outputting the expanded image data to a display memory so that the reduced-sized versions of the series of images are added one by one on the same display (column 4, line 65 to column 5, line 6 of Kuchta) so as to present a plurality of images on the display (column 7, lines 47-52 of Kuchta).

Anderson in view of Lindsay is combinable with Kuchta because they are from the same field of endeavor, namely the control, processing and storage of captured digital image data. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to display the screen-nail images taught by Anderson in a further reduced-resolution format such that the screen-nail images taught by Anderson are added one by one on the same display so as to present a plurality of images on the display, as taught by Kuchta. The motivation for doing so would have been that using a plurality of thumbnail images improves image selection and downloading (column 7, lines 42-45 of Kuchta). Therefore, it would have been obvious to combine Kuchta with Anderson in view of Lindsay to obtain the invention as specified in claim 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/JAT/
14 January 2008

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